PATENT SPECIFICATION

1,023,187

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COMPLETE SPECIFICATION

NO DRAWINGS

Process for the Treatment of Mineral Carbonates

We, OMYA S.A., a French Body Corporate, of 30, Rue Saint-Augustin, Paris, France, do hereby declare the invention, for which we pray that a Patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

In Specification No. 728,698 there is described and claimed a process for the treatment of natural calcium carbonate, in which the grinding of said carbonate is effected in the presence of one or more higher fatty acids at a temperature at least equal to that at which carbonic acid is displaced from the carbonate by the fatty acid or acids. In said Specification the term higher fatty acid means a fatty acid having at least 12 carbon atoms in the molecule.

The types of natural calcium carbonate with which Specification No. 728,698 is concerned are all types of chalk, hard and crystalline calcium carbonates of the so-called "saccharoid structure" and calcium carbonates of the marble type.

The various advantages of treating the above mentioned types of natural calcium carbonate by the process claimed in Specification No. 728,698 are fully set forth in said Specification.

We have now found that the same advantages can be obtained if the process claimed in any one of claims 1 to 6 of Specification No. 728,698 is employed in the treatment of other alkaline-earth carbonates or double carbonates, in the absence of white pigment material having a higher refractive index than that of the alkaline-earth carbonate. Particularly satisfactory results may be obtained when the process is employed to treat the double carbonate of calcium and magnesium, found in nature as dolomite. The proportion of calcium carbonate to magnesium carbonate in the dolomite is of no consequence. Moreover, similarly satisfactory results may be obtained by employing the process for the treatment of mineral magnesium carbonate. The advantages described in Specification No. 728,698 are also obtained when the process is applied to the usual mineral carbonate fillers, for example barium carbonate and strontium carbonate.

WHAT WE CLAIM IS :—

1. The process claimed in any one of claims 1 to 6 of Specification No. 728,698 when applied to alkaline-earth carbonates, other than natural calcium carbonate, in the absence of white pigment material having a higher refractive index than that of the alkaline-earth carbonate.

2. The process claimed in claim 1, when applied to dolomite or magnesium carbonate.

3. A mineral carbonate, other than calcium carbonate, which has been treated by the process claimed in claim 1 or claim 2.

4. Plastic materials or paints containing the mineral carbonate claimed in claim 3.

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